

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

1489-PCT0000

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/002347

International filing date (day/month/year)

16.02.2005

Priority date (day/month/year)

17.02.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

MITSUBISHI HEAVY INDUSTRIES, LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. IV

Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
- ☐ paid additional fees
 - ☐ paid additional fees under protest
 - ☐ not paid additional fees
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:

The inventions of claims 1-14 pertain to a movable fence.

The inventions of claims 15-19 pertain to a method for opening and closing a movable fence using the patterns of the door position information unique to the vehicles.

It cannot be recognized that these are one invention or a group of inventions so linked as to form a single general inventive concept.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☒ all parts

☐ the parts relating to claims Nos. _____

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-19	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP 2002-145049 A (Mitsubishi Electric Corp.), 22 May 2002, Full text; all drawings, Family: none</p> <p>Document 2: JP 2002-362354 A (Kawasaki Heavy Industries, Ltd.), 18 December 2002, Full text; all drawings, Family: none</p> <p>Document 3: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 101942/1981 (Laid-open No. 8669/1983), (Kyosan Electric Mfg. Co., Ltd.), 10 July 1983, Full text; all drawings, Family: none</p> <p>Document 4: JP 2000-502008 A (Yoshitaka HIRANO), 22 February 2000, Full text; Figs. 1-8 & WO 1997/07005 A1</p> <p>Document 5: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 62899/1988 (Laid-open No. 41466/1989), (Mitsui Engineering & Shipbuilding Co., Ltd.), 13 March 1989, Full text; all drawings, Family: none</p> <p>Document 6: JP 2002-308088 A (Nippon Signal Co., Ltd.), 23 October 2002, Full text; all drawings, Family: none</p> <p>Document 7: JP 2001-354133A (Kyosan Electric Mfg. Co., Ltd.), 25 December 2001, Paragraph 0084; all drawings, Family: none</p> <p>The inventions of claims 1, 4, 7-9, and 14 do not appear to involve an inventive step based on document 1 cited in the ISR. Document 1 describes a movable fence composed of door bodies advancing and retracting the openings of door guards. Document 1 describes that the length of the door body can be suitably designed according to the size of the opening part, and therefore making the length of the door body in the advance and retraction direction larger than the length of the door guard is not especially difficult.</p> <p>The inventions of claims 2 and 15-19 do not appear to involve an inventive step based on documents 1 and 2 cited in the ISR. Document 2 describes door bodies whose opening and closing are controlled matching the patterns of the door position information of the vehicles according to the position information of the doors of the incoming vehicles. Also, wireless transmission of information is merely well-known technology.</p>			

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

The invention of claim 3 does not appear to involve an inventive step based on documents 1 and 3 cited in the ISR. Document 3 describes an indicator.

The invention of claim 5 does not appear to involve an inventive step based on documents 1 and 4 cited in the ISR. Document 4 describes a roll curtain type door body. As the movable fences described in documents 1 and 4 have door bodies advancing and retracting the openings of door guards installed at platforms and form surfaces, attachment of the roll curtain described in document 4 to the door body described in document 1 would not be especially difficult.

The invention of claim 6 does not appear to involve an inventive step based on documents 1 and 5 cited in the ISR. Document 5 describes an accordion curtain type door body. As the movable fences described in documents 1 and 5 have door bodies advancing and retracting the openings of door guards installed at platforms and form surfaces, attachment of the accordion curtain described in document 5 to the door body described in document 1 would not be especially difficult.

The inventions of claims 10, 12, and 13 do not appear to involve an inventive step based on documents 1 and 6 cited in the ISR. Document 6 describes fixed fences installed at platforms between door bodies and the neighboring door bodies. Also, the fence described in document 5 has the door body arranged staggered towards the direction of the incoming line. For the item described in document 1, installing the fixed fence described in document 6 for safety of the passengers on the platform or arranging the door bodies in a staggered arrangement and the like towards the incoming direction would not be especially difficult.

The invention of claim 11 does not appear to involve an inventive step based on documents 1 and 7 cited in the ISR. Document 7 suggests operation of the belt drive for the advance and retraction of the door body by hydraulic or pneumatic cylinders, etc.